

Translation

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PATENT COOPERATION TREATY



PCT

10/538058

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 62946	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/EP2003/050973	International filing date (day/month/year) 10 décembre 2003 (10.12.2003)	Priority date (day/month/year) 13 décembre 2002 (13.12.2002)
International Patent Classification (IPC) or national classification and IPC H05K 7/14		
Applicant THALES		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 4 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of _____ sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 01 juillet 2004 (01.07.2004)	Date of completion of this report 21 December 2004 (21.12.2004)
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP2003/050973

I. Basis of the report

1. With regard to the elements of the international application:*

- ☐ the international application as originally filed
- ☒ the description:
 pages _____ 1-9 _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☒ the claims:
 pages _____ 1-17 _____, as originally filed
 pages _____, as amended (together with any statement under Article 19
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☒ the drawings:
 pages _____ 1-6/6/6 _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☐ the sequence listing part of the description:
 pages _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language _____ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/fig _____

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP 03/50973

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1-17	YES
	Claims		NO
Inventive step (IS)	Claims	1-17	YES
	Claims		NO
Industrial applicability (IA)	Claims	1-17	YES
	Claims		NO

2. Citations and explanations

The application relates to an electronic card having a wire-braced structure (claim 1).

Document EP 0 200 597 (D1), which is considered to represent the closest prior art, discloses an electronic card fitted with mechanical supports formed by arched spring blades arranged over the entire length of the card.

The application differs from D1 in that the supports are formed by a first wire-braced structure arranged on the first face of the card and by a second wire-braced structure arranged on the second face of the card.

The subject matter of claim 1 is therefore novel (PCT Article 33(2)).

The replacement of conventional mechanical supports by a wire-braced structure lightens the device while freeing space on the electronic card for implanting components. The object of the application is thus to propose mechanical supports for electronic cards having a lighter mass and occupying a reduced surface of the electronic card.

The other search report citations show other types of mechanical supports or antivibration systems but do not disclose any teaching or indication leading a person skilled in the art to the wire-braced structure proposed in claim 1.

Consequently, the application is considered to involve an inventive step (PCT Article 33(3)).

Claims 2-17 are dependent on claim 1 and meet the requirements of PCT Article 33(2) and 33(3) for novelty and inventive step.

Claims 1-17 are obviously industrially applicable (PCT Article 33(4)).

TRAITE DE COOPERATION EN MATIERE DE BREVETS

PCT

10/538058

RAPPORT D'EXAMEN PRELIMINAIRE INTERNATIONAL

(article 36 et règle 70 du PCT)

REC'D 21 DEC 2004

WIPO PCT

Référence du dossier du déposant ou du mandataire	POUR SUITE A DONNER voir la notification de transmission du rapport d'examen préliminaire international (formulaire PCT/PEA/416)	
Demande internationale No. PCT/EP 03/50973	Date du dépôt international (jour/mois/année) 10.12.2003	Date de priorité (jour/mois/année) 13.12.2002
Classification internationale des brevets (CIB) ou à la fois classification nationale et CIB H05K7/14		
Déposant THALES		



- Le présent rapport d'examen préliminaire international, établi par l'administration chargée de l'examen préliminaire international, est transmis au déposant conformément à l'article 36.
- Ce RAPPORT comprend 4 feuilles, y compris la présente feuille de couverture.

☐ Il est accompagné d'ANNEXES, c'est-à-dire de feuilles de la description, des revendications ou des dessins qui ont été modifiées et qui servent de base au présent rapport ou de feuilles contenant des rectifications faites auprès de l'administration chargée de l'examen préliminaire international (voir la règle 70.16 et l'instruction 607 des Instructions administratives du PCT).

Ces annexes comprennent feuilles.

- Le présent rapport contient des indications et les pages correspondantes relatives aux points suivants :

- I ☒ Base de l'opinion
- II ☐ Priorité
- III ☐ Absence de formulation d'opinion quant à la nouveauté, l'activité inventive et la possibilité d'application industrielle
- IV ☐ Absence d'unité de l'invention
- V ☒ Déclaration motivée selon la règle 66.2(a)(ii) quant à la nouveauté, l'activité inventive et la possibilité d'application industrielle; citations et explications à l'appui de cette déclaration
- VI ☐ Certains documents cités
- VII ☐ Irrégularités dans la demande internationale
- VIII ☐ Observations relatives à la demande internationale

Date de présentation de la demande d'examen préliminaire internationale 01.07.2004	Date d'achèvement du présent rapport 21.12.2004
Nom et adresse postale de l'administration chargée de l'examen préliminaire international  Office européen des brevets - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tél. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016	Fonctionnaire autorisé Schneider, F N° de téléphone +31 70 340-1003 

PCT/EP 03/50973

**RAPPORT D'EXAMEN
PRÉLIMINAIRE INTERNATIONAL**

Demande internationale n°

PCT/EP 03/50973

5. ☐ Le présent rapport a été formulé abstraction faite (de certaines) des modifications, qui ont été considérées comme allant au-delà de l'exposé de l'invention tel qu'il a été déposé, comme il est indiqué ci-après (règle 70.2(c)) :

(Toute feuille de remplacement comportant des modifications de cette nature doit être indiquée au point 1 et annexée au présent rapport.)

6. Observations complémentaires, le cas échéant :

V. Déclaration motivée selon l'article 35(2) quant à la nouveauté, l'activité inventive et la possibilité d'application industrielle; citations et explications à l'appui de cette déclaration

- | | | | |
|--|------|----------------|------|
| 1. Déclaration | | | |
| Nouveauté | Oui: | Revendications | 1-17 |
| | Non: | Revendications | |
| Activité inventive | Oui: | Revendications | 1-17 |
| | Non: | Revendications | |
| Possibilité d'application industrielle | Oui: | Revendications | 1-17 |
| | Non: | Revendications | |

2. Citations et explications

voir feuille séparée

Concernant le point V

La demande concerne une carte électronique à structure haubanée (revendication 1).

Le document D1 (= EP 0 200 597), considéré comme l'état de la technique le plus proche, divulgue une carte électronique munie de renforts mécaniques constitués de lames ressort comportant des voûtes et disposés sur toute la longueur de la carte.

La demande diffère du document D1 en ce que lesdits renforts sont constitués d'une part d'une première structure haubanée disposée sur la première face de la carte et d'autre part d'une seconde structure haubanée disposée sur la seconde face de la carte.

L'objet de la revendication 1 est donc nouveau (Art. 33(2) PCT).

Le remplacement des renforts mécaniques classiques par une structure haubanée permet d'alléger le dispositif tout en libérant de l'espace sur la carte électronique pour l'implantation de composants. Le but de la demande est donc de proposer des renforts mécaniques pour carte électronique dont la masse est allégée et occupant une surface réduite de la carte électronique.

Les autres documents cités dans le rapport de recherche montrent d'autres types de renforts mécaniques ou de systèmes antivibratoires, mais ne divulguent aucun enseignement ou indication permettant à l'homme de l'art d'aboutir à la structure haubanée proposée dans la revendication 1.

Par conséquent, une activité inventive est considérée comme présente (Art. 33(3) PCT).

Les revendications 2-17 sont dépendantes de la revendication 1 et remplissent les conditions de nouveauté et d'inventivité énoncées à l'article 33(2)&(3) PCT.

L'application industrielle des revendications 1-17 est évidente (Art 33(4) PCT).